

The Scorpion King

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As darkness falls upon the desert, one of Iraq's most skilled hunters emerges from its home into the cool night air. In most cases, it will find exactly what it's looking for—usually a small meal or a mate. If you're not careful, however, this predator might set its sights on larger prey. What will you do if you find yourself face to face with the "thick-tailed man killer?"

Scorpions are primal arachnids (eight-legged invertebrates) that have been around for more than 350 million years. They are found from seashores to mountaintops on every continent except Antarctica and are related to spiders, mites, ticks and solifugae (camel spiders). Scorpions are nocturnal predators that leave their burrow for two reasons, either getting a meal or mating, both of which can place them in your path.

The most common of these predators found in Iraq is *Androctonus crassicauda*, or the thick-tailed man killer. This potentially deadly species of scorpion is dark reddish-brown to black with slender pincers and can reach lengths greater than 4 inches. As its name implies, it can be easily identified by its thick tail, which can be as big around as a pinkie finger.

This species appears more abundant because they are comfortable in human environments and are, therefore, more likely to be seen. They can be found anywhere a Soldier is likely to be—from a hooch to the motor pool—because they will crawl into and under anything to hide from the desert sun. In fact, Soldiers and scorpions have been at odds for a long time. Thousands of years ago, in what is today Iraq, locals placed these scorpions into clay jars and threw them at advancing Roman troops.

Increased chances of interactions are what make this predator responsible for many of the scorpion stings in the Middle East. Two scientific journals report more than 10,000 hospital-attended sting cases from a "black scorpion [probably *Acrassicauda*]" during one year in Saudi Arabia and Iran. Probably many more are reported or go unreported—perhaps as many as 100,000 stings per year across the Middle East.

For a military unit like mine, which operated in derelict or reconstructed areas, stings did occur. According to our battalion's physician's assistant, 1LT Christopher Vannucci, there were dozens of unknown bites/stings. Three of these were identified as scorpion stings, with feet and hands being the most common sting locations. Although three scorpion cases may seem like an insignificant number, these were only the verified cases.

To minimize your chance of getting stung, it is helpful to understand this scorpion's behaviors. For instance, a night-in-the-life of one of these critters may go something like this:

It's early evening nautical twilight and it's time for the thick-tailed man killers to leave their burrows to seek out a mate or a tasty morsel (any insect, spider or even another scorpion). The scorpion will roam close to man-made structures (hooch, house or wall) while it remains dark and will continue until it completes its mission of meal, mate or begin morning nautical twilight, when they will dash for darkness.

These scorpions prefer to seek shelter in the burrow where they spent the previous day, but will go inside a boot or under a rucksack, pallet or other equipment if convenient. Most stings occur when the scorpion is upset from its hiding place. The scorpion will react to protect itself from what it views as a predator, which includes you. The initial sting may produce symptoms such as intense pain and inflammation, numbness, frothing at the mouth, difficulty or inability to breathe with possible muscle spasms and convulsions. According to 1LT Vannucci, the

symptoms in his cases were more often reported as throbbing, burning and/or itching.

If you are unfortunate enough to get stung, your battle buddy should carefully kill the scorpion for identification and take you and it directly to the nearest medic/aid station. Some people may be allergic to the scorpion's venom and may enter anaphylactic shock, so it is imperative you immediately seek medical attention.

While I was stationed in Iraq, I completed a rigorous behavioral study using *Androctonus crassicauda* as my test subject and have a few pointers for commanders and their Soldiers. Essentially, to maintain a fit fighting force, I recommend the following prevention strategies for the thick-tailed man killer:

- Treat these animals with respect and do NOT play with them; they are potentially deadly.
- Always be aware of yourself, your gear and equipment, such as where you put it and how you move it.
- Never go to the latrine or shower barefoot or in shower shoes; wear physical fitness shoes or, even better, boots.
- Remove loose debris and piled stucco or wall materials accumulating at the base of derelict structures.
- Eliminate conditions (like poorly drained sanitary water) that might attract the scorpion's prey (like cockroaches).
- Seal wall cracks or open masonry with caulking or cement—especially at wall bases.
- Screen or weather strip doors, windows and vents.

If the above prevention strategies are not enough, apply one of the following:

- Carefully and quickly dispatch the scorpion with the heel of your boot.
- If an infestation is suspected, have your supply or field-ordering officer purchase a pesticide such as permethrin (Prelude®, Dragnet®) or cypermethrin (Demon®) and apply per instructions to the problem area.

Remember, the desert has been this scorpion's home for millions of years; you're just a visitor. Treat them with the respect they deserve and you'll avoid falling victim to the thick-tailed man killer.

Editor's note: SGT Alexander Stewart was deployed in support of Operation Iraqi Freedom II (Iraq and Kuwait) from December 2003 to May 2005. While stationed in northern Iraq, 50 km north of Samarra, he served as the battalion S-3 (operations) communications chief, historical officer and "Trailblazer," or volunteer route clearance (IED/VBIED) leader. He also spent four months during the summer researching this scorpion species, completing a prey-capture analysis, habitat preference analysis and activity-level analysis.

Did You Know---The deserts and highlands of Iraq, Kuwait and Afghanistan are crawling with arachnids such as scorpions, spiders and solpugids, or camel spiders. Three of the deadliest scorpions in the world call Iraq and Kuwait home, and at least three venomous spiders—the black widow, tarantula and yellow sac spider—are found in both countries. Several species of scorpion are native to Afghanistan, as are the black widow, tarantula and camel spider. Soldiers should never handle any of these creatures and always shake out their shoes, bed linens or sleeping bags and clothing to prevent bites. A full-color poster showing the arachnids found in theater can be downloaded off the Army Center for Health Promotion and Preventive Medicine's Web site at <http://chppm-www.apgea.army.mil/deployment/arachnidsofiraqandkuwait.pdf>.